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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,523	09/14/2007	James T. Craig	31118/DY0401	9899
4743	7590	12/17/2010	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP 233 SOUTH WACKER DRIVE 6300 WILLIS TOWER CHICAGO, IL 60606-6357			COLILLA, DANIEL JAMES	
			ART UNIT	PAPER NUMBER
			2854	
			NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mgbdoCKET@marshallip.com

Office Action Summary	Application No. 10/589,523	Applicant(s) CRAIG, JAMES T.	
	Examiner Daniel J. Colilla	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15 and 17-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/12/2010 have been fully considered but they are not persuasive of any error in the below rejection.

With respect to claim 1-7, 9-11, 13, 17-22 and 24-25, the Inui reference has been added which clearly teaches stopping of the printing process when a spacing between markings differs from a reference value.

With respect to applicant's arguments regarding claim 15, the examiner disagrees. Petteruti teaches the general concept of remotely controlling a printer using a transmitter and a remote computer. While, the exact details of the processes being controlled via the transmitter may not be disclosed by Petteruti, one of ordinary skill in the art would recognize that any process can be controlled via a transmitter and remote computer. Wireless communications were extremely well-known at the time of invention and use of such communications would have been obvious to anyone of ordinary skill in the art.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 9-11, 13 and 17-22 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inui (US 5,980,142) in view of Sims et al. (US 6,380,965).

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With respect to claim 1, Inui discloses the claimed printer except for the regularly spaced markings being provided on a backing material. Inui discloses a printer for printing an image on an image receiving material, said image receiving material having regularly spaced markings 39 provided on the back thereof; said printer comprising:

a printhead 14 for printing the image on the image receiving material, when said printhead is in a printing configuration and said image receiving material 10 is being pulled from a supply (as shown in Fig. 1 of Inui); a detector 36 for detecting said markings 39 provided on the image receiving material while the image receiving material 10 moves past the printhead 14 and the image is being printed on the image receiving material; and a device 55 for determining at least one of a spacing LT between two markings (Inui, col. 5, lines 23-33), comparing the determined marking spacing LT with a respective reference value TJ and for causing the printing to be stopped if, as said image receiving material is being pulled from the supply and is moving past said printhead, at least one of the determined spacing and/or width differs from the respective reference value by more than a predetermined amount (Inui, col. 6, lines 56-66, “the system controller 55 stops transporting the recording material 10 and driving the thermal head 14”).

While Inui does not disclose what type of image receiving material is used, Sims teaches a printer for printing on an image receiving material provided on a backing material (Sims et al., col. 9, lines 58-63) with said backing material having regularly spaced markings 70 provided on the back thereof (as shown in Fig. 4 of Sims et al.). It would have been obvious to combine the teaching of Sims with the printer disclosed by Inui for the advantage of printing on an image receiving material that can be adhered to a desired surface (i.e. printing a label).

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With respect to claim 13, Inui discloses the claimed printer system except for the image receiving material provided on a backing material, said backing material having regular spaced markings provided on the back thereof. Inui discloses a printer system for printing an image on an image receiving material 10, said image receiving material having regularly spaced markings 39 provided on the back thereof said printer system comprising:

a printhead 14 for printing the image on the image receiving material 10, when said printhead 14 is in a printing configuration and said image receiving material 10 is being pulled from a supply (as shown in Fig. 1 of Inui); a detector 36 for detecting said markings 39 provided on the image receiving material is provided while the image receiving material moves past the printhead 14 and the image is being printed on the image receiving material; and a device 55 for determining a spacing LT between two markings 39, comparing the determined marking width and/or spacing with a respective reference value TJ and for causing the printing of the image to be stopped if, as said image receiving material is being pulled from the supply and is moving past said printhead, the determined spacing differs from the respective reference value TJ by more than a predetermined amount (Inui, col. 5, lines 23-33).

While Inui does not disclose what type of image receiving material is used, Sims teaches a printer for printing on an image receiving material provided on a backing material (Sims et al., col. 9, lines 58-63) with said backing material having regularly spaced markings 70 provided on the back thereof (as shown in Fig. 4 of Sims et al.). It would have been obvious to combine the teaching of Sims with the printing system disclosed by Inui for the advantage of printing on an image receiving material that can be adhered to a desired surface (i.e. printing a label).

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With respect to claim 2, Inui discloses that the detector 36 comprises at least one of a light sensitive receiver (“light receptor,” Inui, col. 3, line 40) and a light source (“light projector,” Inui, col. 3, line 40).

With respect to claim 3, while Inui does not specify the type of light sensitive receiver, Sims et al. teaches a detector 72 including a light receiver 92 that is a phototransistor (Sims et al., col. 13, lines 59-63).

With respect to claim 4, while Inui does not specify the type of light source, Sims et al. teaches a detector 72 including a light source 90 that is a light emitting diode (Sims et al., col. 13, lines 59-63).

With respect to claim 5, Inui discloses that the determining device includes a processor 53.

With respect to claims 6 and 21, Inui in view of Sims et al. discloses the claimed printer except that it is not known to the examiner what the specific reference value is. However, it would have been obvious to one of ordinary skill in the art to adjust the reference value to whatever amount is needed through ordinary, routine experimentation. It would have been obvious to specifically set the reference value to differ from the spacing at 20% or more for the advantage of a large value that would ensure that there was indeed a problem with the feeding of the image receiving material and that it isn't just an anomaly being detected.

With respect to claim 7, Inui discloses that the determining device is arranged to cause an error message to be displayed if printing is stopped (Inui, col. 6, lines 64-66).

With respect to claim 9, Inui discloses that reference value TJ is a time value that can be converted into a length value based on the feed rate of the image receiving material (Inui, col. 5,

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lines 46-57). Inui further discloses that a constant B may be added to the time value. Thus the length that this time can be converted into represents a range of values.

With respect to claim 10, Inui in view of Sims et al. disclose the combination of the printer and the image receiving material provided on a backing material as mentioned above with respect to claim 1.

With respect to claim 11, Sims et al. discloses that the image receiving material is a continuous tape (Sims et al., col. 9, lines 58-63).

With respect to claim 17, Inui discloses that the detector 36 comprises at least one of a light sensitive receiver ("light receptor," Inui, col. 3, line 40) and a light source ("light projector," Inui, col. 3, line 40).

With respect to claim 18, while Inui does not specify the type of light sensitive receiver, Sims et al. teaches a detector 72 including a light receiver 92 that is a phototransistor (Sims et al., col. 13, lines 59-63).

With respect to claim 19, while Inui does not specify the type of light source, Sims et al. teaches a detector 72 including a light source 90 that is a light emitting diode (Sims et al., col. 13, lines 59-63).

With respect to claim 20, Inui discloses that the determining device includes a processor 53.

With respect to claim 22, Inui discloses that the determining device is arranged to cause an error message to be displayed if printing is stopped (Inui, col. 6, lines 64-66).

With respect to claim 24, Inui discloses that reference value TJ is a time value that can be converted into a length value based on the feed rate of the image receiving material (Inui, col. 5,

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lines 46-57). Inui further discloses that a constant B may be added to the time value. Thus the length that this time can be converted into represents a range of values.

With respect to claim 25, Inui discloses Inui discloses comparing time values LT and TJ (Inui, col. 6, lines 56-61) instead of actual spacing (distance or length). However, using the well-known equation $\text{speed} = \text{distance} / \text{time}$ or $\text{distance} = \text{speed} * \text{time}$ to calculate the actual spacing is an obvious variation. Note, Inui teaches that an assumed rotation speed of a platen 11 (motor 23 drives rollers 20b and 206a on either side of the platen 11--thus the speed of the platen is assumed to be the same as these rollers) is $P1 \times Q1$ (Inui, col. 5, lines 47-52).

4. Claims 8, 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inui (US 5,980,142) in view of Sims et al. (US 6,380,965), as applied to claim 1 above, and further in view of Vleurinck et al. (US 2004/0036915).

With respect to claims 8, 14 and 23, Inui in view of Sims et al. discloses the claimed printer except for the PC. However, Vleurinck et al. discloses a printer 560 used in combination with a PC 562 (Vleurinck et al., paragraph [0101], Fig. 12). It would have been obvious to combine the teaching of Vleurinck et al. with the printer disclosed by Inui in view of Sims et al. for the advantage of operating the tape printer at a distance from the tape printer itself (Vleurinck et al., paragraph [0103]).

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sims et al. (US 6,380,965) in view of Petteruti et al. (US 5,267,800).

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With respect to claim 15, Sims et al. discloses the claimed printer except for the transmitter for sending information related to the detected marking to a computer. Sims et al. discloses a printer 26 for printing an image on a image receiving material provided on a backing material (Sims et al., col. 9, lines 58-63), said backing material having regularly spaced markings 70 provided on the back thereof, said printer comprising: a detector for detecting said markings; and a transmitter for sending information relating to said detected marking to a computer for processing.

While Sims et al. does not explicitly disclose this, Sims et al. does disclose that the device 62 determines that no pulses are provided by the sensor arrangement (Sims et al., col. 17, lines 1-2). In such a sensor system, this is determined by a comparison of time measured between pulses the measured time being the equivalent of the marking spacing. In a microchip, such as device 62, this measured time must inherently be compared with a reference value (the reference value being a specified amount of time that is allowed to pass) in order for the device 62 to arrive at the determination that the motor has stalled or that the tape has jammed.

When markings 70 are no longer sensed (the spacing differs from the respective reference value by more than a predetermined amount); the device 62 causing printing to be stopped (the printing is linked to strobe signals from the microchip 62 which strobes when a signal from detector 72 is received; Sims et al., col. 13, lines 12-30). Thus when the markings are not sensed strobe signals are not sent and printing is not performed.

Petteruti et al. teaches a printer that can be connected to a host computer (Petteruti et al., col. 1, lines 23-27) and can transmit status messages based on the state of the printer to the host computer (Petteruti et al., col. 3, lines 25-27). It would have been obvious to combine the

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teaching of Petteruti et al. with the printer disclosed by Sims et al. for the advantage of alerting the user at a remotely located computer that the printer has stopped printing due to a jam or other abnormal state.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel J. Colilla** whose telephone number is **571-272-2157**. The examiner can normally be reached on M and W, 7:30-5:00 and T, Th and F, 8:30-4:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Judy Nguyen** can be reached at **571-272-2258**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel J. Colilla/

Primary Examiner

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December 14, 2010